

4. Width. The width of the ladder shall be a minimum of 20 inches wide and a maximum of 30 inches wide.

5. Handrails. a. Handrails shall be required for ladders with pitches less than 65°.

b. Handrails shall be located at least 30 inches, but not more than 34 inches, above the nosing of the treads.

c. Open handrails shall be provided with intermediate rails or an ornamental pattern such that a sphere with a diameter larger than 9 inches cannot pass through.

d. The clearance between the handrail and the wall surface shall be at least 1½ inches.

e. Handrails shall be designed and constructed to withstand a 200 pound load applied in any direction.

6. Clearances. a. The ladder shall have a minimum clearance of at least 15 inches on either side of the center of the tread.

b. The edge of the tread nearest to the wall should be separated from the wall by at least 7 inches.

c. A passage way clearance of at least 30 inches parallel to the slope of a 90° ladder shall be provided. A passage way clearance of at least 36 inches parallel to the slope of a 75° ladder shall be provided. Clearances for intermediate pitches shall vary between these 2 limits in proportion to the slope.

d. For ladders with less than a 75° pitch the vertical clearance above any tread or rung to an overhead obstruction shall be at least 6 feet 4 inches measured from the leading edge of the tread or rung.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80; r. and recr. Register, February, 1985, No. 350, eff. 3-1-85.

**ILHR 21.05 Light and ventilation. (1) NATURAL LIGHT.** All habitable rooms shall be provided with natural light by means of glazed openings. The area of the glazed openings shall be at least 8% of the net floor area, except under the following circumstances:

(a) *Exception.* Habitable rooms, other than bedrooms, located in basements need not be provided with natural light.

(b) *Exception.* Natural light may be obtained from adjoining areas through glazed openings, louvers or other approved methods. Door openings into adjoining areas may not be used to satisfy this requirement.

(2) **VENTILATION. (a) Natural ventilation.** Natural ventilation shall be provided to all habitable rooms, kitchens and bathrooms by means of openable exterior doors or windows. The net area of the openable exterior doors or windows shall be at least 3.5% of the net floor area of the room. Mechanical ventilation may be provided in lieu of openable exterior doors or windows provided the system is capable of providing at least one air change per hour.

(b) *Exhaust ventilation.* All exhaust ventilation shall terminate outside the building.

## ILHR 21

(3) **ATTIC VENTILATION.** Ventilation above the ceiling/attic insulation shall be provided as specified in either s. ILHR 22.05 (3) (a) or s. ILHR 22.11 (3) (a).

(4) **CRAWL SPACE VENTING.** Crawl spaces shall be vented in accordance with either s. ILHR 22.05 (3) (b) or s. ILHR 22.11 (3) (b). Unheated crawl spaces shall be provided with a concrete slab, roll roofing or plastic film vapor barrier.

(5) **SAFETY GLASS.** Glass in entrance and exit doors, sliding glass doors, storm doors, bathtub enclosures, shower doors, and fixed glass panels immediately adjacent to doors shall be safety glass.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80; r. and recr. (1) and (2), Register, February, 1985, No. 350, eff. 3-1-85; r. and recr. (3) and (4), Register, July, 1986, No. 367, eff. 1-1-87.

**ILHR 21.06 Ceiling height.** All habitable rooms, kitchens, hallways, bathrooms and corridors shall have a ceiling height of at least 7 feet. Habitable rooms may have ceiling heights of less than 7 feet provided at least 50% of the room's floor area has a ceiling height of at least 7 feet. Beams and girders or other projections shall not project more than 8 inches below the required ceiling height.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80; r. and recr. Register, February, 1985, No. 350, eff. 3-1-85.

**ILHR 21.07 Attic and crawl space access.** (1) **ATTIC.** Attics shall be provided with an access opening of at least 14 by 24 inches, accessible from inside the structure.

(2) **CRAWL SPACE.** Crawl spaces shall be provided with an access opening of at least 14 by 24 inches.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80.

**ILHR 21.08 Firestopping, draftstopping and fire separation.** (1) **FIRE-STOPPING LOCATIONS.** Firestopping shall be provided in the following locations:

(a) In concealed spaces of walls and partitions, including furred spaces, at the ceiling and floor levels;

(b) At all interconnections between concealed vertical and horizontal spaces such as occur at soffits, drop ceilings and cove ceilings; and

(c) In concealed spaces between stair stringers at the top and bottom of the run.

(2) **FIRESTOPPING MATERIALS.** Firestopping shall consist of 2-inches nominal lumber or 2 thicknesses of one inch nominal lumber or one thickness of ¾-inch plywood with joints backed by ¾-inch plywood. Gypsum wallboard, mineral wool insulation or other noncombustible material may also be used for firestopping.

2. Prevent attaching combustible furring and sheathing to the masonry exterior.

(e) All spaces between the masonry and the framing shall be draft stopped.

History: Cr. Register, February, 1985, No. 350, eff. 3-1-85.

**ILHR 21.31 Factory-built fireplace stoves.** Factory-built fireplace stoves, consisting of a free-standing chamber assembly, shall be tested and listed by a nationally recognized testing laboratory. The assembly shall be erected and maintained in accordance with the listing.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80.

**ILHR 21.32 Factory built fireplaces.** Factory-built fireplaces consisting of a fire chamber assembly, one or more chimney sections, a roof assembly and other parts shall be tested and listed by a nationally recognized testing laboratory.

(1) **FIREPLACE ASSEMBLY AND MAINTENANCE.** The fireplace assembly shall be erected and maintained in accordance with the conditions of the listing.

(2) **DISTANCE FROM COMBUSTIBLES.** Portions of the manufactured chimney extending through combustible floors or roof/ceiling assemblies shall be installed in accordance with the distances listed on the chimney in order to prevent contact with combustible materials.

(3) **HEARTH EXTENSIONS.** Hearth extensions of not less than 3/8-inch thick hollow metal, stone, tile or other approved material shall be provided. The minimum dimensions of the hearth shall be based upon the size of the fireplace opening as specified in Table 21.32-1.

TABLE 21.32-1  
HEARTH DIMENSIONS

Fireplace Opening (sq. ft.)	Extension from Firebox (inches)	
	Side	Front
Less than 6 6 or Greater	8	16
	12	20

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80; renum. from Ind 21.30 and r. and recr. (3), Register, February, 1985, No. 350, eff. 3-1-85.